

WHAT IS CLAIMED IS:

Claim 1. A device for binding a boot to a sports article, said device comprising:
a retaining system adapted to connect a front of the boot to the sports article
and to allow a rear of the boot to be moved with respect to the sports article between a
low position and a high position;

an elastic return system for elastic return of the boot to the low position;

the retaining system being distinct from the elastic return system;

the elastic return system comprising at least:

an elastic member to be connected to the sports article; and

a flexible linkage connected to the elastic member to be
directly or indirectly to the boot, said flexible linkage cooperating with at least one return
member.

Claim 2. A binding device according to claim 1, wherein:

the flexible linkage has, on a first side the return member, a portion
connected to the elastic member and extending in a substantially horizontal direction, and,
on a second side of the return member, a portion connected to the boot and extending in
a direction substantially parallel to a direction of relative movement of the boot in relation
to the binding device.

Claim 3. A binding device according to claim 1, wherein:

the return member comprises a pulley.

Claim 4. A binding device according to claim 1, wherein:

the return member comprises a curved sliding surface on which the flexible
linkage takes support and slides.

Claim 5. A binding device according to claim 1, wherein:

the flexible linkage comprises a cable.

Claim 6. A binding device according to claim 1, wherein:

the flexible linkage comprises a traction strip.

Claim 7. A binding device according to claim 1, further comprising:

a member for connecting to the boot which is adapted to be connected to the boot; and

wherein the flexible linkage is connected to the connecting member.

Claim 8. A binding device according to claim 7, wherein:

the connecting member comprises a hook connected to the binding device only by means of the flexible linkage, and which is adapted to be connected to a connection bar of the boot.

Claim 9. A binding device according to claim 8, wherein:

in the absence of the boot, the hook is automatically returned by means of the elastic return system to a resting position that is predetermined by the cooperation of the hook with complementary forms of the device.

Claim 10. A binding device according to claim 9, further comprising:

an opening mechanism that drives the hook from a resting position to a cleared waiting position allowing the positioning of the boot; and

wherein, when the hook returns to the resting position, the connection bar of the boot is arranged on the trajectory of the hook to ensure connection to the bar.

Claim 11. A binding device according to claim 1, wherein:

the retaining system comprises a jaw adapted to receive a rod for articulating the boot in the manner of a hinge.

Claim 12. A binding device according to claim 7, wherein:

the connecting member is part of the retaining system and is capable of moving in relation to the sports article between a low position and a high position;

the boot is adapted to be connected to the connecting member; and

the flexible linkage of the elastic return system connects the elastic member to the connecting member, in order to return the connecting member and the boot to the low position.

Claim 13. A binding device according to claim 12, wherein:

the connecting member is connected to the sports article by a guiding mechanism.

Claim 14. A binding device according to claim 13, wherein:

the guiding mechanism comprises at least one rocker bar articulated with respect to the sports article.

Claim 15. A binding device according to claim 14, wherein:

the return member comprises a pulley; and

the pulley is coaxial with an axis about which the rocker bar moves in relation to the sports article.

Claim 16. A binding device according to claim 1, further comprising:

a base that is affixed to the sports article; and

wherein the elastic member is connected to the sports article by means of the base.

Claim 17. A binding device according to claim 1, wherein:

the connecting member comprises a convex surface that is in support on the sports article.

Claim 18. A binding device according to claim 1, further comprising:
in addition to the elastic return system, a rigid or elastic abutment positioned to act at the end of travel of the boot.

Claim 19. A binding device according to claim 1, further comprising:
a mechanism for adjusting the stiffness of the elastic member.

Claim 20. A binding device according to claim 19, wherein:
the mechanism for adjusting the stiffness allows adjusting a more or less substantial prestress of the elastic member.

Claim 21. A binding device according to claim 1, wherein:
the return and the end of the flexible linkage that is connected to the boot are arranged at a short distance from one another.

Claim 22. A binding device according to claim 1, wherein:
the end of the flexible linkage connected to the boot and the return are arranged in the vicinity of the metatarso-phalangeal articulation zone of the user's foot when the boot is in the low position.